

AMENDMENTS TO THE DRAWINGS

Please replace sheet one of the drawings containing FIG. 1 with the attached replacement sheet one containing amended FIG. 1.

REMARKS

In response to the Examiner's request for a corrected FIG 1. applicant is submitting a replacement sheet containing FIG. 1 labeled PRIOR ART.

The Examiner's rejection of claims 1-8 under 35 U.S.C. § 102(e) for being anticipated by the Boroditsky et al. published patent application UA 2002/0071153, as this rejection may be attempted to be applied to amended claims 1-8, is respectfully traversed..

Boroditsky et al. discloses a method that:

1. Combines packet switched (TDM) and WDM schemes in a two dimensional multiplexing scheme and employs $n \times n$ optical switches.
2. Employs composite packets generated locally by tunable laser and 'stacked' by passing packets through an array of circulators and delay lines to cause synchronization of packets into timeslots. Each timeslot containing composite packets that may passed through a given switch node or be dropped for further distribution to users connected to the switch node using WDM or other techniques.
3. Describes how 'Transparent Bypass' may occur where a selected portion of a composite packet may be dropped at a switch node without affecting the remaining portion which passes through the switch node unaltered. This is accomplished by using a fixed add/drop bandwidth allocation scheme that is based on fiber Bragg gratings.
4. Employs photonic delay lines to achieve 'Time-slot-interchange'
5. Employs circulators and optical delay lines to allow composite packets that pass through a node to be merged with composite packets that are generated at the node by a tunable source.

Unlike the system of the present invention present invention, which allows individual wavelengths to be switched independently of each other, the Boroditsky et al. patent application disclosure relates exclusively to Photonic Slot Routing wherein composite packets are made up of several fixed length packets that are synchronized in a single timeslot but at different wavelengths. While Boroditsky et al. suggests a scheme wherein 'Transparent Bypass' may occur to allow selected wavelengths in a composite packet to be dropped without affecting the remaining

portion, this selectivity does not constitute 'Individual Wavelength Switching' as is disclosed and claimed in applicant's communication system. While Boroditsky et al. suggests that the fiber Bragg gratings can be made tunable, Boroditsky et al. recognize that this will not be possible on a packet by packet basis to allow effective individual switching of wavelengths within a timeslot.

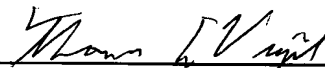
Accordingly, the Boroditsky et al. disclosure is constrained to a particular subset of capabilities inherent in their system. By allowing individual wavelengths to be switched independently, the communication system of the present invention is much more flexible and possesses a finer bandwidth granularity than Boroditsky et al. disclosures. To illustrate this point, applicant observes that in the Boroditsky et al. disclosure, all wavelengths in a particular timeslot would be switched together as an integral unit from source to destination; whereas in the communication system of the present invention, each wavelength in a particular timeslot can be switched to a different destination. Unlike the Boroditsky et al. disclosure, the communication system of the present invention (for example) can be configured to offer independent granular 50Mbps connections in a network having path rates of 10 Gbps.

In summary, applicant submits that the amended claims are clear of the art of record, particularly the Boroditsky et al. published patent application, and are otherwise in condition for allowance. An early and favorable action to that end is requested.

Respectfully submitted,

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